

PROJECT ABSTRACT

Project Title: Innovative Models to Analyze and Address Racial, Ethnic, and Geographic Disparities in Maternal and Child Health Outcomes (CFDA 93.110AJ)
Project Number: H73MC00006
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PROBLEM: In Alaska, dramatic health status disparities among racial and geographic groups have been identified for children and for women of childbearing age, but resources for in-depth, focused analysis of contributing factors to assist prevention and treatment programs has been lacking. Overall mortality rates and many cause-specific rates are higher for Alaska Natives than they are for other race groups. (See Health Status in Alaska, 2000 Edition, Data and Evaluation Unit, DPH, Alaska DHSS 2001, www.hss.state.ak.us/dph/deu/publications/hs2000.html) Although injury death rates have declined over the last decade, significant disparities remain. The 1999 injury mortality rate for children 0-19 was 31/100,00 for all Alaskan children and 75/100,000 for Alaska Native children. Among women 15-44, the 1999 injury mortality rates were 139/100,000 for Alaska Native women, compared to 51/100,000 for all Alaskan women. To identify the less obvious disparities, and to advise state and federal policy-makers and program managers about groups at risk and modifiable risk factors, a comprehensive approach to synthesize and analyze multiple data sources is needed.

GOALS AND OBJECTIVES: The project will improve the ability of the Alaska Division of Public Health as a whole to analyze, report on, and target racial, ethnic and geographic disparities in childhood and maternal injury morbidity and mortality. The goals are to develop the data sets related to injury morbidity and mortality in order to produce racially and geographically specific information in timely fashion, and to disseminate the information in a culturally sensitive and user-friendly fashion. Objectives include ensuring effective participation of the minority groups and programs that can guide development of appropriate methodologies, sharing of data sources, and preparation of culturally relevant and understandable presentation of results. The project will develop the knowledge base and state information system capacity to use existing data sets to identify disparities, contributing factors (environmental, socio-economic, behavioral), and appropriate interventions

METHODOLOGY: Existing data sources, including Trauma Registry, vital records, Behavioral Risk Factor Surveillance Survey, Youth Risk Behavior Survey, Medical Examiner Data (including all child fatalities), and Maternal Infant Mortality Review data will be analyzed using a consistent framework permitting multivariate analysis, with aggregation across time when needed to have sufficient data for analysis. The grant will provide the resources to develop more sophisticated approaches to analysis, to use the sources more effectively to address a very high priority areas for improving health of Alaska's women and children, by enhancing the state's capacity to specify and reduce racial, ethnic and geographic disparities in health status.

COORDINATION: A critical partnership with the Alaska Native Epidemiology Center (EpiCenter) within the Alaska Native Health Board (ANHB) will be enhanced through this substantive project. Joint planning and data sharing will strengthen the existing working relationship. An Advisory Committee including the ANHB EpiCenter, Alaska Injury Prevention Center, Division of Public Health staff, and advocates for other disparate groups will help plan, guide implementation, and assist with evaluation and dissemination. Feasibility of data linkage (outpatient, inpatient and vital records) for research into racial and geographic disparities and into causal relationships and correlations is of interest to all partners. Products will include data analyses and culturally appropriate reports and presentations most needed for planning and evaluating injury prevention programs among Alaska's racial, ethnic and geographic minority populations. Both web-based publication and hard copy will be used.

EVALUATION: The tracking of indicators through the Healthy Alaskans 2010 process will ensure assessment of outcomes over time. The Data and Evaluation Unit is responsible for the tracking of indicators and reporting progress on the project activities. Activities include the design and implementation of interventions based on the disparities and associated risk factors that have been identified, and effective dissemination of data, analyses, and guidelines. Stakeholders will be asked to assess the project in terms of its stated goals and objectives, their expectations, and national Maternal Child Health Bureau goals.

EXPERIENCE TO DATE: The Advisory Committee has met and set priorities for injury data and identified significant gaps in existing injury data. A data analysis plan has been completed and reviewed by the Advisory Committee. Preliminary analysis of motor vehicle and snowmobile deaths revealed a preponderance of males 30 to 40. This injury category, therefore, was dropped from the priority list for this grant. A descriptive pilot study of State Medical Examiner Records of youth suicides identified disparities in death scene investigations and documentation of high rates of school failure and contact with law enforcement.

KEY WORDS:

Disparities

Alaska Natives

Cultural diversity

Data analysis

Data systems

Injuries

Injury prevention

Minority groups

Rural populations

School age children

Unintentional injuries